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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,690	01/16/2002	Thomas-C. Adams	SC 013 CIP 7	8621

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16690 Champion Forest Drive
Spring, TX 77379-7023

EXAMINER

KOHNER, MATTHEW J

ART UNIT	PAPER NUMBER
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3653

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/050,690

Applicant(s)

ADAMS ET AL.

Examiner

Matthew J Kohner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment /Argument

1. Applicant has cancelled claims 1-21 and added new claims 22-42. Applicant has included limitations indicated allowable in the previous office action (namely claim 9) in the new independent claims 22, 41 and 42. In updating the search of the prior art, Examiner found references which anticipate the previously indicated allowable subject matter. Examiner regrets the indication of allowability in the previous office action, because in view of the new art these claims are not allowable. Examiner regrets any inconvenience caused by this mistake. As a result of the newly discovered prior art used in this action, the action is non-final.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 37 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 37 is a method of making the frame. Claim 37 depends from claim 36. Claim 36 is a method for using the frame. Therefore, claim 37 is a mixed class claim which is improper.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 22-27, 29-35 and 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,967,336 to Baltzer et al.

Baltzer discloses a method for using a screen assembly on a vibratory separator, the screen assembly having non-flat areas of screening material thereon, the non-flat areas of screening material between lines of glue,

- gluing together a plurality of layers of screening material (Col. 1, lines 50+), the plurality of glued-together layers of screening material secured to a frame (Col. 1, lines 52+), the frame comprising:

two ends (18 and 20), each end connected to and spaced-apart by one of two spaced-apart sides (14 and 16), the two spaced-apart sides including a first side and a second side and the frame including

a plurality of spaced-apart cross-members (40,42,44,46,48,50), each cross-member extending from the first side to the second side,

the method comprising:

- mounting the screen assembly on a vibratory separator (Col. 1, lines 15+), the vibratory separator located in an environment at an ambient temperature,

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- vibrating the screen assembly with the vibratory separator for a period of time (Col. 1, lines 15+),
- feeding material to be treated onto the screen assembly (Col. 1, lines 15+).

Baltzer does not specifically disclose the temperature of the material to be treated, nor the period of time the material is on the screen assembly. However, Examiner notes that the limitation of claim 22 wherein, "the period of time of such a temporal length and the material temperature of such a temperature to effect flattening of the non flat areas of screening material" is very broad. Further, it would be obvious to one of ordinary skill in the art that known shale shakers such as Baltzer et al. would vibrate the drilling mud at such a temperature for such a period of time.

In regard to claims 23-24, it is well known in the art that drilling mud can reach temperatures of several hundred degrees (See attached paper¹ especially Fig. 5).

In regard to claim 25, Baltzer discloses that the vibrating shakers are used at oil well drilling sites (Col. 1, lines 27+) and that the mixture of materials is fed on the top of the screen assembly (Col. 1, lines 18+).

In regard to claims 26 and 27, Baltzer does not disclose using cured moisture-curing hot melt glue to glue together the plurality of layers of screening material. Rather, Baltzer discloses using epoxy (Col. 2, lines 55+). It would be obvious to one of ordinary skill in that art to use another adhesive such as glue to secure the plurality of layers together. Examiner notes that

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applicant has argued that “[m]oisture-curing hot melt glue is different from such epoxies in both structure, use, and in results achieved in a screen assembly.” However, Examiner does not contend that the glue and epoxy are the same. Examiner merely contends that the use of the moisture curing hot melt glue would be obvious to one of ordinary skill in the art in light of the teachings of Baltzer.

Further, the limitation of the glue being “applied in a pattern” is very broad and is not further defined in the specification. Baltzer does not specifically disclose how the epoxy is applied. However, it would be obvious to one of ordinary skill in the art that the adhesive could be applied in a particular, replicable, way (i.e. a pattern) rather than just merely applying adhesive haphazardly and differently in each screen produced.

In regard to claims 29-32, Baltzer discloses that the plurality of layers is secured to the frame by glue or *other adhesives* (Col. 2, lines 57+).

In regard to claim 33, Baltzer discloses a clip (22) for mating with the vibrating screen machinery.

In regard to claims 34 and 35, Baltzer does not specifically disclose that the plurality of layers include at least a lower layer of coarse mesh and at least one layer of fine mesh. Instead, Baltzer merely discloses a multiple layers of wire screen cloth (Col. 1, lines 50+). However, it is well known in the art to use at least a lower layer of coarse mesh and at least one layer of fine mesh (See e.g. US Patent No. 5,417,793 to Bakula, Col. 9, lines 1-15).

In regard to claim 40-42, Baltzer discloses a clip (22) for mating with the vibrating screen machinery.

¹ Prediction of Formation Equilibrium Temperature while Drilling based on Drilling Mud Temperature: Inverse

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4. Claims 36, 38 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,967,336 to Baltzer et al.

Baltzer discloses a method for using a screen assembly on a vibratory separator, the screen assembly having non-flat areas of screening material thereon, the non-flat areas of screening material between lines of glue,

- gluing together a plurality of layers of screening material (Col. 1, lines 50+),
the plurality of glued-together layers of screening material secured to a frame (Col. 1, lines 52+),

the method comprising:

- mounting the screen assembly on a vibratory separator (Col. 1, lines 15+), the vibratory separator located in an environment at an ambient temperature,
- vibrating the screen assembly with the vibratory separator for a period of time (Col. 1, lines 15+),
- feeding material to be treated onto the screen assembly (Col. 1, lines 15+).

Baltzer does not specifically disclose the temperature of the material to be treated, nor the period of time the material is on the screen assembly. However, Examiner notes that the limitation of claim 36 wherein, "the period of time of such a temporal length and the material temperature of such a temperature to effect flattening of the non flat areas of screening material" is very broad. Further, it would be obvious to one of ordinary skill in the art that known shale

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shakers such as Baltzer et al. would vibrate the drilling mud at such a temperature for such a period of time.

Further, in regard to claim 36, Baltzer does not disclose using cured moisture-curing hot melt glue to glue together the plurality of layers of screening material. Rather, Baltzer discloses using epoxy (Col. 2, lines 55+). It would be obvious to one of ordinary skill in that art to use another adhesive such as glue to secure the plurality of layers together. Examiner notes that applicant has argued that “[m]oisture-curing hot melt glue is different from such epoxies in both structure, use, and in results achieved in a screen assembly.” However, Examiner does not contend that the glue and epoxy are the same. Examiner merely contends that the use of the moisture curing hot melt glue would be obvious to one of ordinary skill in the art in light of the teachings of Baltzer.

In regard to claim 38, Baltzer discloses that the vibrating shakers are used at oil well drilling sites (Col. 1, lines 27+) and that the mixture of materials is fed on the top of the screen assembly (Col. 1, lines 18+).

In regard to claim 40, Baltzer discloses a clip (22) for mating with the vibrating screen machinery.

5. Claims 28 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,439,392 to Baltzer.

In regard to claim 28, Baltzer '392 discloses a method for using a screen assembly on a vibratory separator, the screen assembly having non-flat areas of screening material thereon, the non-flat areas of screening material between lines of glue,

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- gluing together a plurality of layers of screening material (Col. 1, lines 50+), the plurality of glued-together layers of screening material secured to a frame (Col. 1, lines 52+), the frame comprising:

two ends (18 and 20), each end connected to and spaced-apart by one of two spaced-apart sides (14 and 16), the two spaced-apart sides including a first side and a second side and the frame including

a plurality of spaced-apart cross-members (40,42,44,46,48,50), each cross-member extending from the first side to the second side,

the method comprising:

- mounting the screen assembly on a vibratory separator (Col. 1, lines 27+), the vibratory separator located in an environment at an ambient temperature,
- vibrating the screen assembly with the vibratory separator for a period of time (Col. 1, lines 27+),
- feeding material to be treated onto the screen assembly (Col. 1, lines 15+).

Baltzer does not specifically disclose the temperature of the material to be treated, nor the period of time the material is on the screen assembly. However, Examiner notes that the limitation of claim 22 wherein, “the period of time of such a temporal length and the material temperature of such a temperature to effect flattening of the non flat areas of screening material” is very broad. Further, it would be obvious to one of ordinary skill in the art that known shale shakers such as Baltzer et al. would vibrate the drilling mud at such a temperature for such a period of time.

In regard to claim 28, Baltzer discloses the ends and sides of the frame are tubular (See e.g. Fig. 8).

Examiner also notes of the related application mentioned on page 1 of the specification to which the present application claims priority only 2 (10/037,474 filed 10/19/01 and 09/707,277 filed 11/6/00) disclose tubular side members in their respective specifications. Baltzer '392 was filed on 10/18/99.

In regard to claim 39, Baltzer discloses a method for using a screen assembly on a vibratory separator, the screen assembly having non-flat areas of screening material thereon, the non-flat areas of screening material between lines of glue,

- gluing together a plurality of layers of screening material (Col. 1, lines 50+),
- the plurality of glued-together layers of screening material secured to a frame (Col. 1, lines 52+),

the method comprising:

- mounting the screen assembly on a vibratory separator (Col. 1, lines 15+), the vibratory separator located in an environment at an ambient temperature,
- vibrating the screen assembly with the vibratory separator for a period of time (Col. 1, lines 15+),
- feeding material to be treated onto the screen assembly (Col. 1, lines 15+).

Baltzer does not specifically disclose the temperature of the material to be treated, nor the period of time the material is on the screen assembly. However, Examiner notes that the

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limitation of claim 22 wherein, "the period of time of such a temporal length and the material temperature of such a temperature to effect flattening of the non flat areas of screening material" is very broad. Further, it would be obvious to one of ordinary skill in the art that known shale shakers such as Baltzer et al. would vibrate the drilling mud at such a temperature for such a period of time.

Further, Baltzer does not disclose using cured moisture-curing hot melt glue to glue together the plurality of layers of screening material. Rather, Baltzer discloses using epoxy (Col. 2, lines 55+). It would be obvious to one of ordinary skill in that art to use another adhesive such as glue to secure the plurality of layers together. Examiner notes that applicant has argued that "[m]oisture-curing hot melt glue is different from such epoxies in both structure, use, and in results achieved in a screen assembly." However, Examiner does not contend that the glue and epoxy are the same. Examiner merely contends that the use of the moisture curing hot melt glue would be obvious to one of ordinary skill in the art in light of the teachings of Baltzer.

Baltzer discloses the frame comprising:

- two ends (18 and 20), each end connected to and spaced-apart by one of two spaced-apart sides (14 and 16), wherein the end and sides are tubular members (See e.g. Fig. 8), and wherein the two spaced-apart sides include a first side and a second side and the frame includes
- a plurality of spaced-apart cross-members (40,42,44,46,48,50), each cross-member extending from the first side to the second side.

Examiner also notes of the related application mentioned on page 1 of the specification to which the present application claims priority only 2 (10/037,474 filed 10/19/01 and 09/707,277

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filed 11/6/00) disclose tubular side members in their respective specifications. Baltzer '392 was filed on 10/18/99.

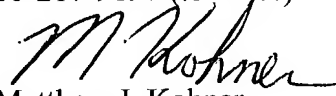
Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

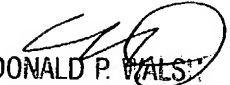
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Kohner whose telephone number is 703-305-8496. The examiner can normally be reached on Mon-Fri 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on 703-306-4173. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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Examiner
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